Ontario

Premier's Council on
Health Strategy

NURTURING HEALTH

A FRAMEWORK ON THE DETERMINANTS OF HEALTH

A VISION OF HEALTH FOR ONTARIO

We see an Ontario in which people live longer in good health, and disease and disability are progressively reduced. We see people empowered to realize their full health potential through a safe, non-violent environment, adequate income, housing, food and education, and a valued role to play in family, work and the community. We see people having equitable access to affordable and appropriate health care regardless of geography, income, age, gender or cultural background. Finally, we see everyone working together to achieve better health for all.

ONTARIO'S FIRST HEALTH GOALS

Goal 1: Shift the emphasis to health promotion and disease prevention.

Goal 2: Foster strong and supportive families and communities.

Goal 3: Ensure a safe, high quality physical environment.

Goal 4: Increase the number of years of good health for the citizens of Ontario by reducing illness, disability and premature death.

Goal 5: Provide accessible, affordable, appropriate health services for all.

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NURTURING HEALTH

A FRAMEWORK ON THE DETERMINANTS OF HEALTH

Healthy Public Policy Committee

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March, 1991

The Honourable Bob Rae
Premier of Ontario
Queen's Park
Toronto, Ontario

Dear Premier Rae:

The Healthy Public Policy Committee of the Premier's Council on Health Strategy is pleased to present to you a discussion paper on the determinants of health – *Nurturing Health*. Based on recent research, this document outlines a new framework for health that encourages investments in public policies outside of the traditional health services sector.

This new framework for health reflects the Council's continued commitment to the broader definition of health as articulated in its earlier document *A Vision of Health: Health Goals for Ontario.*

In developing this framework, the Healthy Public Policy Committee, in collaboration with the Canadian Institute for Advanced Research, examined the research on the determinants of health. Based on the research, this framework views health as dynamically linked to prosperity. Furthermore, it sees the link between health and prosperity as mediated by social and physical environments, and by individual responses to these environments.

In the context of this framework the committee began to consider priorities for public policy that could have a significant and lasting impact on the health of Ontario citizens and support the achievement of Ontario's health goals.

An inventory of major public policy initiatives having the potential to have a positive impact on health was conducted with senior advisers across the provincial ministries of government. Three areas having significant potential to impact on the health of the population were identified and recommended as priority areas for action to improve the health of Ontarians. These are: Healthy Child Development Policy; Adult and Labour Market Adjustment Policy; and Environmental Policy.

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The committee held policy workshops with experts from each of the three potential priority areas. The workshops succeeded in identifying a number of potential policy initiatives, some of which can be found in the appendix of this discussion paper.

In its commitment to improve the health of the population, the Premier's Council on Health Strategy recognizes the vital importance of future investments in public policies outside of the traditional health sector. We encourage the government to build on this new framework for health, supporting the development of public policies which maximize prosperity and health for Ontarians.

Yours very truly,

Dr. Reva Gerstein, Chair

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Dr. Stuart MacLeod

Dr. Robert Spasoff

Joan Watson

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In addition, the committee wishes to thank the many individuals across government for their contribution to the public policy inventory. The committee would also like to thank the experts from the health care sector, academic institutions, and government and non-government organizations who gave their time and knowledge to the policy workshops. They are identified in Appendix B of this document.

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EXECUTIVE SUMMARY

Public policy initiatives in certain key areas outside of conventional health services can improve the health of Ontario citizens.

This conclusion is based on research evidence of the powerful link between individual health and social and physical environments.

This report:

1) summarizes the *research* on the determinants of health; and

2) points to three priority policy *areas* which, the committee believes, will nurture health and thus contribute to the achievement of Ontario's Health Goals. The three areas are:

   1. healthy child development policy;

   2. adult adjustment and labour market adjustment policy; and

   3. environmental policy.

The link between health and the social and physical environment has not yet been widely understood. Many people still think health gains are possible only through expenditures on the formal health care system. But the medical treatment system has a limited role to play in improving the overall *health* of the population. International and Canadian research data show that other factors are more important determinants of health than the formal health care system.

Our excellent health care system must be subjected to continuous quality improvements, but if we want to nurture health we must also make investments in other areas of public policy. These investments are premised on the recognition that a healthful lifestyle is not just a matter of individual choice.

Key points in the report include:

- Health has come to be closely associated with individual lifestyle – and hence individual choice. Peoples' lifestyles, however, (their smoking, drinking and eating habits, for instance) are strongly influenced by the social environment.
- There is a very strong link between economic health and population health. National prosperity is vital to the physical and mental health of the population.
- Social and physical environments – as manifested in the places people work and live, their education, income, and social supports -- have a major impact on people's health.

  For example:

  - The care that children receive and the basic coping skills they learn are critical to their future health and educational attainment.
  - Major life changes – such as separation, job loss or retirement – have a significant impact on adult health. The way in which people adjust to these upheavals depends in large part on the social environment.
  - The work environment, and the larger physical environment, have significant impacts on the health of individuals.
- Social and physical environments affect the health of the *entire* population. The most dramatic health differentials are between the rich and the poor, but the largest group affected is the middle class.

- Socio-economic gradients in health status persist over time even though major causes of death change. This suggests an overall greater vulnerability on the part of poorer people. Research showing biological and behavioural links between the nervous system and the immune system may shed light on this greater vulnerability.
- Although health gradients are related to factors such as income and social class, evidence indicates that nations or regions with low per capita wealth can improve the health of their populations through changes to the social environment.
- Countries with conscious policies that maintain healthy social and physical environments have improved the health status of their populations and compressed the gradients in health status.
- Finally, it is clear that any initiatives concerning the determinants of health must take into account the social and economic framework of society.

This paper is intended to stimulate discussion of a range of public policy initiatives, outside of conventional health care, that have significant potential to improve health. It is also intended to generate action in three areas of public policy which this committee feels can help achieve Ontario's health goals and improve the health of Ontario citizens.

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PREFACE

At the turn of the 20th century, public health measures were widely recognized as important health safeguards. But in the following decades – indeed for most of this century – health became almost entirely equated with curative medicine.

More recently, an increasing number of Canadians are beginning to realize the fundamental importance of social and physical environments to individual health.

Health is again taking on a broader meaning that includes, but is not restricted to, the medical and the public health "models." This broader meaning of health is reflected in *A Vision of Health*, the Premier's Council on Health Strategy's vision statement, and the five initial health goals for Ontario.

The 1974 publication of the internationally-acclaimed federal report *A New Perspective on the Health of Canadians*[1] represented an important milestone in the evolving concept of health.

The federal report identified the central importance of health care organization, social and physical environments, lifestyle and behaviour. But the Lalonde report, as it is known, did not speak to the differences in social environment between the various subgroups in society. The social environment of the poor, for instance, is clearly different from that of the middle class which is different from that of the wealthy.

Universal access to quality medical care is an important principle in Canadian society. Canada spends more on health care (on a per person basis) than any other industrialized country with national health insurance.[2] But the availability of high quality medical care does not mean there is equal access to health, which remains an unevenly distributed resource. And some countries have better overall health, as measured by length of life, than we do.[3]

To understand disparities in health status and to formulate policies to improve health, Canadians must also recognize that a healthful lifestyle is not just a matter of individual choice.

In Ontario, as in Canada, the health of the population as measured by mortality (death) and morbidity (disease) is expressed as health status within each income group. People in lower socio-economic groups experience worse health and die sooner than people in middle income groups, who in turn experience worse health and die sooner than individuals in higher income groups. While universal access to medical care can help people who become ill, it has little effect on differences in health status between income groups.[4]

- A baby born to parents living in a poor neighbourhood in an Ontario city in 1986 was twice as likely to die in infancy as a baby born to parents living in a wealthy neighbourhood.[5]
- In 1986, a poor man in urban Ontario would live, on average, 5.3 years less than a rich man, while a poor woman would live 1.8 fewer years than a rich woman.

These gradients in health status are rooted in the social environment. Children born to parents in lower socio-economic groups, for instance, are more likely than those in higher socio-economic groups to have low birth weights, to have difficulty in school, to eat less wholesomely, and to drop out of school.

Although the biggest difference in health status is found between the top group and the bottom group, the largest group affected is the middle classes.

A growing body of national and international research has identified a long list of important factors in the social environment that influence the health status of individuals. As this report will show, these factors include: early childhood experience; hierarchical positions at work; workplace hazards; family and friendship supports; employment status; and environmental factors.

This report focuses on a review of the research on the health effects of these factors which, while sometimes admittedly broad and general-sounding, are measured by the specific and unequivocal yardstick of mortality.

It is clear to this committee that public policy has a vital, active role to play in providing, and equalizing, the opportunities for optimal health.

The Health Care System Committee of the Premier's Council on Health Strategy indicated in the *From Vision to Action* report that the resources dedicated to the health care system can be better utilized. A realignment of resources within the health care system should "allow us to receive greater value in terms of improved health from our tax dollars," the committee has concluded.[6]

This committee believes that even more significant improvements in health can result from policy initiatives outside the arena of the health care system proper. In particular, gains in overall health status can follow from carefully planned interventions in social and physical environments.

Initiatives both inside and outside the formal health care system are necessary.

At the conclusion of this paper, we give consideration to the development of practical policy initiatives that would modify social and physical environments and thereby improve health. Three target policy areas are identified in this report which would help to achieve both the vision of health, and the first five health goals articulated by the Premier's Council on Health Strategy.

All policy initiatives suggested in this discussion paper support, in some way, Ontario's health goals which are:

Goal 1 – shifting the emphasis to health promotion and disease prevention;

Goal 2 – fostering strong and supportive families and communities;

Goal 3 – ensuring a safe, high quality physical environment;

Goal 4 – increasing the number of years of good health for the citizens of Ontario by reducing illness, disability and premature death; and

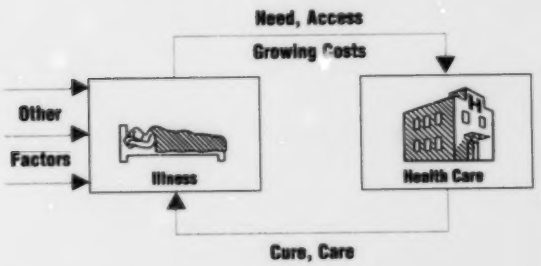
Goal 5 – providing accessible, affordable, appropriate health services for all.

A. A FRAMEWORK ON THE DETERMINANTS OF HEALTH

I. INTRODUCTION TO THE CONCEPT

Attitudes to health have been dominated by a viewpoint that equates health status with the availability of physicians and hospitals. This belief is reflected in the size of the current health care industry which represents the largest cluster of economic activity in all modern states.[7]

This popular myth, which could be described as a "thermostat" model of illness, has hampered wider consideration of the meaning of health. As a framework for understanding the determinants of health, it is limited to a focus on departures from health (illness) and the corresponding health care system.



In this perspective, the causes of ill health to a person are like cold and wind to a house: they are external factors that public policy cannot control. The only possible response, then, is to attempt to diminish illness by "turning up the furnace" – by putting more money into the health care system, and specifically into treatment.

The problem is, there does not appear to be an optimum temperature. Rather, the furnace is fueled by "unmet needs" and the belief that "more is always better" as well as many other factors.[8] Health is also influenced by many other elements. In fact, we know that there is no simple, positive relationship between spending on formal health care and the population's health status. There is growing concern in all developed countries regarding the cost of health care.

This "thermostat" idea has led to the current situation where medical care, hospital care, laboratory tests and prescription drugs absorb most of our attention and money when it comes to addressing poor health. In Canada, this stems in part from the national origins of medicare which began as insurance to cover the costs of doctors and hospitals.

We know now that increased spending on formal health care in developed economies is not having a corresponding positive impact on health status. At the same time, there is growing evidence that population health status may be significantly influenced by measures taken outside the formal health care system.

Clearly, a broader framework than the "thermostat" model is needed – one that reflects a wider range of relationships among the determinants of health.

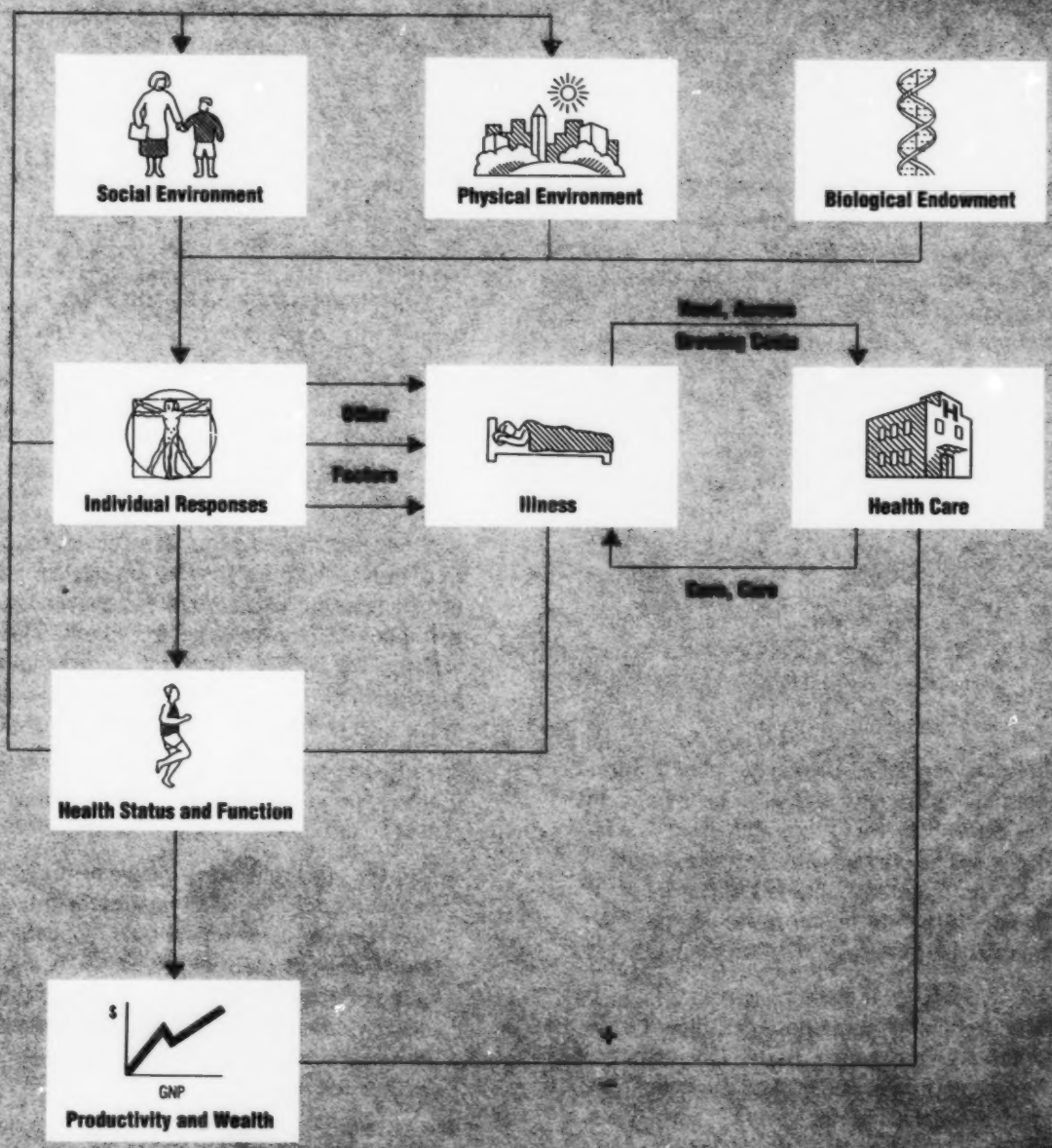
Recently, health has come to be closely associated with individual lifestyle.[9] Unhealthy activities, such as smoking, are often referred to as self-imposed risks resulting from individual choice. This attitude, when not accompanied by a recognition that much behaviour is socially-derived, sets the scene for blaming the victim.

It is important to consider the nature of "choice" in these "personal decisions." As American public health expert Nancy Milio notes:

> *"... people with lesser incomes are forced to choose among fewer alternatives for coping. Thus a greater share of them turn to what is at hand – alcohol, cigarettes, food – all economically accessible in an affluent society if substituted for other things. And they turn most to the least costly (cigarettes) or most available (excess calories)."*[10]

When health is not viewed strictly as an individual matter, and the links between health and social environment are openly acknowledged, it becomes possible to think about the problem of poor health in a different light. As a result, different policy issues can emerge.

Population Health: Determinants



Our society has also become accustomed to unnecessarily high levels of measurable hazard in the human-built physical environment. Much can be done, for instance, to reduce air pollution, traffic fatalities and occupational illnesses. To fuel reform, we must demonstrate that many of the accidents that people have come to accept as inevitable are in fact preventable and that system-wide changes can improve the physical environment and our health.

The diagram on the opposite page presents a framework which illustrates the complex interrelationships between the many determinants of health. Selected research on the determinants illustrated in the diagram will be described in the following sections of this report. The diagram incorporates the basic "thermostat" discussed above and suggests that, because the determinants are mostly beyond the reach of the formal health care system, pumping ever-increasing amounts of money into this system is unlikely to significantly improve the health of the population.

Given the many other determinants of health identified in the framework diagram (physical and social environments, one's biological endowment, individual behavioral and immunologic responses, and the importance of individual and national productivity and wealth), it becomes evident that the formal health care system is but one factor. It will also become evident as this framework unfolds, that many of the causes of ill health are not beyond the reach of public policy.

II. SOCIAL ENVIRONMENT AND HEALTH: THE RESEARCH

Wide disparities in health status are not unique to Canada and the relationship between characteristics of the social environment, socio-economic status and health is not a new discovery. Canadian and international research is underscoring the role that various social and economic factors play in determining people's health. The research has been broken down into five categories: health services; work hierarchy; unemployment; social networks; and prenatal/early childhood.

1) HEALTH CARE

Because of its vital role in improving ill health, effective medical treatment is an important determinant of health. Its very success, however, has resulted in a tendency for the public to overestimate medicine's contribution to health. Practising doctors frequently express frustration about how they are usually able to treat only the symptoms, not the causes, of ill health. They are acutely aware of the impact of the social environment on health and yet cannot tackle the problem directly.

Today, there is limited scope for effective medical intervention with many of the leading causes of death. While there are a few new effective treatments for particular types of cancer, primarily in children, for instance, there has been little overall improvement in the last 20 years in the outlook for people suffering from the most common forms of cancer.[11]

The mortality rate for cardiovascular disease, the largest cause of premature death in Canada, has fallen steadily in the past 25 years.[12] But researchers have concluded that medical intervention is responsible for only a small portion of this improvement. They suspect that factors such as changes in social environment and in individual behaviour (such as smoking and eating habits) explain much of the remaining decline in death rates.

Since the traditional medical care system concentrates on the treatment of ill health and disability, it can only make a limited contribution to the prevention of illness by nurturing overall good health.

2) WORK HIERARCHY AND THE ORGANIZATION OF WORK

A study of the British civil service [13] reveals noteworthy mortality differences for most causes of death between four classes of male civil servants. Over the period studied, those in the lowest grade died at three times the rate of those in the highest grade.

The study findings are all the more noteworthy because none of the employees was living in poverty, and all had good job security. They all worked in same location (London) and were not exposed to industrial hazards.

The biggest gap was for lung cancer, chronic bronchitis and other respiratory disease, which are all strongly smoking-related. The extent of smoking differed markedly between the civil service grades. The study showed that 29 per cent of the top grade civil servants smoked, compared to 68 per cent of the bottom grade.

This gradient in smoking behaviour raises the question of how this behaviour is a product of the social environment. The study also found, however, that *non-smoking* lower grade civil servants had higher death rates due to chronic heart disease and other causes (not including cancer) than their higher grade counterparts.

Another British study concluded that the organization of work, and in particular the freedom to make decisions, are the basis for the strong link between social class and heart disease.[14] Reviewing international research, the authors found that the lower the "decision latitude" at work, the higher the proportion of smokers. Examining the links between social

class and chronic heart disease on an international level, and considering the evidence from the civil service study, the researchers suggest that:

> *"above a threshold of poverty, position on the social hierarchy per se may be a more important determinant of health and disease than material conditions."*

This study also noted that while blood pressure rates were similar between high grade and low grade male civil servants in Britain while at work, the rates fell much more for upper grade men than for lower grade men when they were at home.

Latitude in decision-making is only one of the important factors in the organization of work that impacts on health. Workplace social supports, as measured by the number and quality of interactions with co-workers, also has an effect on health. Health is also affected by the stress related demands of a job such as, the pace of work , the frequency of deadlines and reporting requirements.[15]

A recent study of Swedish workers examined the health effects of work control and social support on work stress and cardiovascular disease. Cardiovascular disease occurred most often among those in high demand jobs, with a low level of both work control and social supports.[16]

The lifespan and the health of an individual worker is linked to his or her location in the job hierarchy and to associated factors such as degree of authority, freedom to make decisions and level of social support in the workplace.

3) UNEMPLOYMENT

Research on the health effects of unemployment has been conducted at both a population level (where variations in the rates of unemployment are linked to variations in official mortality and morbidity figures) and on a smaller scale and case study basis.

A Danish study on unemployment and mortality found a significantly higher death rate – between 40 and 50 per cent higher – among the unemployed than the employed. The study, which covered the decade from 1970 to 1980, found increased mortality from all the five major causes of death, especially from suicide or accidents. In areas of the country with higher overall unemployment rates, the relative death rate among the unemployed was lower.

Increased mortality among the unemployed was interpreted to be a consequence of two factors: health-related selection (those who were unemployed because they were sick) and increased susceptibility associated with the psychosocial stress of unemployment.[17]

A review of the research on unemployment and health completed for the World Health Organization (WHO) found that:

> *"high levels of unemployment and economic instability cause a significant increase in the levels of mental ill health and also have adverse effects on the physical health not only of the unemployed but also of their families and the community in general."*[18]

The WHO review stated that research into the experience of unemployed people has "consistently shown that unemployment of more than a few weeks' duration causes physiological stress. This may in turn lead to an increase in blood pressure and heart disease."

Using data from the 1978 Canada Health Survey, one Canadian study found that:

> *"The unemployed reported significantly more psychological distress, anxiety, and depressive symptoms, disability days, activity limitation, health problems, hospitalizations and visits and telephone calls to physicians than did the employed."*[19]

Lower-income unemployed people reported more anxiety and depressive symptoms than higher-income unemployed.

More recently, a preliminary analysis of Statistics Canada's 1989 General Social Survey found that the unemployed and those in insecure full-time employment reported lower health and life satisfaction than the employed in secure jobs.

In this analysis, which also considered the gender, age and education of respondents, study author Paul Grayson indicates that it is possible, and desirable, to target certain groups for health promotion activities based on their labour force status.[20]

Other studies have supported the view that unemployment or the threat of unemployment is a major stress factor. And the "stress response as such (i.e. elevated blood pressure, elevated blood lipid levels etc.) plus stress-related behaviour (i.e. weight gain, smoking etc.) are both risk factors in the pathogenesis of cardiovascular disease."[21]

The majority of doctors in a Swedish study felt that unemployment led to certain disease symptoms and an increase in the demand for medical care. When the doctors were asked what measures should be taken to improve health, they gave highest priority to measures to defeat unemployment.[22]

The central importance of economic prosperity to health will be more fully considered in Section 5 of this paper – Productivity, Wealth and Health.

Unemployment, especially among poorer people, is associated with deteriorating physical and mental health.

4) SOCIAL NETWORKS

Researchers in the United States have found a clear link between social support networks and death rates, suggesting that social relationships (or the lack thereof) constitute a major risk factor for health.

A study done in California found that, for both men and women, the more social contacts people had, the lower their mortality rate.[23] The study established four categories from least to most social connections. It found that for men 60 to 69 years old the death rate among those with the least connections was four out of 10 compared to two out of 10 for those with the most connections. Comparable figures among women were three out of 10 and one out of ten.

Overall, men with the least number of social contacts are more than twice as likely to die as their same-age counterparts having many contacts. For women, those with the least contacts are almost three times as likely to die at a given age.

It has long been known that married people live longer than unmarried people. A link between widowhood and higher rates of illness and death is similarly well established. The California study also found, however, that a variety of social and community ties influence death rates.

Subsequent research in the United States and elsewhere has confirmed the California results,[24] leading to the observation that social relationships may rival the effects of well-established health risk factors such as smoking, blood pressure, obesity and physical activity.

People with more social contacts and friends tend to live longer than those with fewer.

5) PRENATAL/EARLY CHILDHOOD CONDITIONS

Research also shows that prenatal and early childhood conditions have a clear impact on health.

The way in which children are cared for at an early age can influence their coping skills – and, by association, their health – not only for the rest of their childhoods but also for their entire lives.

A recent review of the research on early childhood interventions by the Ontario Ministry of Community and Social Services concludes that primary prevention projects for children can be successful.[25] The review recommends integrated programs of services to families and children because:

"...the close association between poverty and risk holds for every component of risk – from premature birth to poor health and nutrition, from failure to develop warm, secure, trusting relationships early in life to child abuse, from family stress to failure to master social skills. Programs aimed at any one risk will be helpful, but since the risk factors interact, programs aimed at multiple risk factors should produce greater, more stable and longer term effects."

The report warns that it is an illusion to believe that "single, simple, relatively inexpensive, one-shot programs can produce long-term positive advantages for economically disadvantaged children."[26]

However, prenatal programs to prevent low birth weight babies (LBW, 2500 grams or less) can produce unambiguous, long-term positive advantages.[27] LBW is a known risk factor for mortality and disease and Canada has a higher rate of LBW babies than countries such as Norway, France, Japan and Sweden.[28]

LBW babies have a 40-times-greater chance of dying during the first four weeks of life than do newborns whose birth weight is higher.[29] As well, among LBW babies there is a greater prevalence of neurological deficits, congenital abnormalities, and retarded development.[30]

Research shows a strong relationship between lower socio-economic status and the risk of having a LBW baby. A Montreal study [31] found that a high incidence of LBW babies is also associated with a mother's age (under 20 or 35 or older), level of education (less than 11 years), and marital status (unmarried). There is evidence that intervention can reduce the incidence of infant mortality and LBW babies.

A key intervention to prevent LBW babies is improved nutrition for the mother. In the United States, the Special Supplemental Food Program for Women, Infants and Children (WIC) found that food supplements were instrumental in reducing the incidence of LBW and premature babies.[32]

Some studies point to interventions, and to family and individual characteristics, which may at least partially offset the harmful effects of poverty on the physical and mental health of children.

The American Perry Preschool Program [33] is one of the most important in a series of preschool projects that provided the empirical basis for "Head Start" and other early childhood programs.

The Perry Preschool Program involved five groups of children who were followed until age 19. Poor youngsters were randomly assigned to either an enriched preschool program or to a control group. In early childhood, those in the enriched program demonstrated higher intellectual performance than the control group. In elementary school, the same group showed better scholastic placement and achievement.

By adolescence, those from the enriched preschool program had a lower rate of delinquency, a higher rate of high school graduations and a higher rate of employment. As well, those from the enriched program had comparatively less drug abuse and a lower teenage pregnancy rate.

It should be noted, however, that these programs, as part of an American policy, provide early childhood programs to a very limited number of eligible disadvantaged children. With improved accessibility, early childhood programs may go a long way to offset the harmful effects of poverty on the physical and mental health of children.

The harmful effects of poverty on the physical and mental health of children can be partially offset by public programs. Intervention can reduce the number of Low Birth Weight babies, who are prone to suffer from major health problems.

III. PHYSICAL ENVIRONMENT AND HEALTH: THE RESEARCH

Any planning for health must address the importance of both the human-made and the natural environment.

We recognize that the boundary between the physical environment and the social environment can become blurred because of the complex interaction of the two. For the purposes of this report, however, physical environment is defined as structures or conditions that can be physically altered.

In some cases, policy options with respect to the physical environment are more obvious than those pertaining to the social environment. On the other hand, the "blind spots" that prevent policy makers from recognizing the need for reform can be formidable obstacles.

A myriad of environmental factors influence health. For the sake of brevity we have chosen to highlight three that we believe have significant, and readily understandable, health effects.

1) OCCUPATIONAL HEALTH

Adults who work outside the home spend about one-quarter of their life in the workplace, yet many have little choice about, or control over, their work settings.

Workplace injuries and occupational illness exact a large toll in terms of diminishing the health of workers, yet many workplace injuries and illnesses are preventable. A recent study from the Organization for Economic Co-operation and Development (OECD), however, notes that occupational injury rates in Canada rose by about one-third from 1955 to 1987.[34] During the same period, rates declined by half in France, Germany and the United Kingdom and by one-third in Sweden, Austria and Belgium.

In Ontario in 1988 alone, 293 people lost their lives due to occupational illness or injury and more than 215,000 lost-time claims were made to the Workers' Compensation Board (WCB)[35]. The latter figure understates injury and illness since some workplace accidents go unreported to the WCB.

It is apparent that important health gains can be achieved in Ontario through improved occupational health and safety measures.

2) MOTOR VEHICLE INJURIES

Motor vehicle accidents are the third leading cause (after cancer and heart disease) of potential years of life lost in Canada.[36] (This measurement looks at years of life lost before age 75, which is now the average life expectancy, so that deaths at earlier ages are seen to result in a greater loss of life.) Yet for years, officials concerned with health paid scant attention to the thousands of lives lost, and injuries caused, by motor vehicle accidents.

In Ontario, motor vehicle accidents are the leading cause of death for people aged 15 to 24 years old, and the second major cause of death (after suicide) for people 25 to 34 years old.[37]

In 1987, 1,229 people died in Ontario motor vehicle accidents and 121,089 were injured.[38]

People concerned about road safety are particularly frustrated by the fact that governments do not promote or adopt measures known to be effective in preventing injury. Leon Robertson of the epidemiology department at Yale University notes:

> *"One can ask in almost any community and find where the local 'dead man's' curve is located. What is not so easily found are public officials who understand that there are remedies, such as enhanced perception of curvature, energy absorbing guardrails, and removal of rigid objects . . . The attitude too often seems to be that human beings who are not perfect deserve the death penalty."*[39]

Robertson notes that the maximum speed capacity of most vehicles is twice the maximum legal speed limit and that "such capability is contrary both to goals of safety and fuel economy."[40]

Transport Canada estimates that about 70 per cent of Canadian drivers and passengers use seat belts[41] and that if this level were pushed to 95 per cent by 1995, some 13,000 fatalities and 340,000 injuries could be avoided over a 20 year period.[42]

Federal officials note that West Germany, the United Kingdom and parts of Australia have already achieved 95 per cent compliance with seat belt laws.[43] They add, however, that for Canada to reach that level requires enforcement and persuasion on a scale not yet seen in this country.

The potential exists to make important, even dramatic, health gains in Ontario in the area of road and motor vehicle safety.

3) AIR POLLUTION

The devastating effects of air pollution have been underscored recently by revelations from Eastern Europe, where enforcement of standards has been extremely lax.

In Upper Silesia, a highly industrialized region of Poland, residents suffer from 15 per cent more cases of circulatory disease, 30 per cent more cancer, 47 per cent more respiratory problems, 100 per cent more diabetes and 100 per cent more liver disease deaths than the national average, according to a World Bank study and to reports from local health officials.[44]

In the West, where air pollution has been more vigorously controlled, the health effects are nonetheless discernible. A study of southern Ontario, for example, found a consistent link during the summer between hospital admissions for respiratory illness, the temperature, and the levels of sulphate and ozone in the air.[45]

While standards for outdoor air pollution have existed for many years, attention has shifted recently to the importance of indoor air pollution, since most individuals spend 75 to 90 per cent of their time indoors, in residences or public buildings.[46]

Research has shown, for instance, that one-third of non-smokers' lung cancer deaths are caused by exposure to the smoking of other people (so-called passive smoking). This public health risk is "larger than the hazardous air pollutants from all regulated industrial emissions combined."[47]

Indoor air pollution, especially second-hand smoke, is a major health hazard.

IV. INDIVIDUAL RESPONSES (PSYCHONEUROIMMUNOLOGY)

There is growing evidence that mental health influences physical well-being although the exact pathways and the biological mechanisms are not yet clear. Animal experiments show a direct linkage between the central nervous system and the immune system. It appears that soluble factors, often referred to as cytokines, enable the central nervous system to communicate with the immune system.[48]

Psychological factors, which work through the central nervous system, may well influence the body's host defence system, perhaps through making peoples' vulnerability to disease depend on the state of the body's immune system.

There is clear evidence, for instance, of immune suppression in recent widowers and clinically depressed people. Recently widowed people also have a higher death rate than married people of the same age[49] (see Social Networks).

A Stanford University study of cancer deaths shows the importance of psychological factors in human disease.[50] Among women with serious breast cancer, those who engaged in supportive group psychotherapy lived, on average, one and a half years longer than those in a control group who did not have the psychotherapy. Both groups underwent standard medical therapy.

The psychiatrist who conducted this research, Dr. Spiegel, cautions that therapy may have led to better compliance with doctor orders; but clearly, something about being in these groups helped these women live longer.

This relationship between psychological factors and the immune system may be a key to explaining health outcomes related to income, unemployment, work hierarchy, span of control and social support.

Psychoneuroimmunology, an emerging and still controversial field of knowledge, may go a long way to explaining a biological pathway linking social and environmental factors with the performance of the immune system and hence the health status of individuals.

V. PRODUCTIVITY, WEALTH AND HEALTH: THE RESEARCH

In his pioneering work *The Modern Rise of Population*,[51] Thomas McKeown showed that the dramatic decline in mortality from infectious diseases from the early 1800s to the middle 1970s could not be wholly, or even primarily, explained by medical interventions or public health measures.

Instead, he attributed 70 to 75 per cent of the gain in life expectancy to factors associated with the increased prosperity that resulted from the industrial revolution. It is thought that improved nutrition was the major influence.

Today, the firmest data on health determinants link health status to income. There is a strong correlation, for instance, between income and life expectancy in Canadian males.[52]

But income data are really a proxy for socio-economic status. It is not money itself, but the conditions, opportunities and amenities provided by money that are important to health.

1) SOCIAL RANK AND HEALTH

Canadian data indicate a clear link between socio-economic status and health status.

In the Canada Health Promotion Survey of 1985, people surveyed were asked to rate their own health, activity limitations and happiness. A recently published special review of the survey data found that:

> *"For persons aged 25 to 64, health status and quality of life are clearly lowest among the poor, those with little education, the unemployed and persons whose main activity is keeping house, while they are highest among the rich, the university educated, and those employed in professional/managerial occupations. This confirms other studies (which show) . . . the poorer you are, the less healthy you are likely to be, over a shorter lifetime."*[53]

Researchers Russell Wilkins and Owen Adams created a measurement of health called "health expectancy" based on 1978 data on mortality, long-term institutionalization and disability.[54] Their work showed that men in the top 20 per cent income bracket live on average six years longer than those in the bottom 20 per cent income bracket, and can expect 14 more years of life free of activity restriction.

For women, the comparable figures are three years, and an additional eight years of life free of activity restriction. The data also show that while women have longer life expectancies than men, that longer life is also subject to greater health limitations.

More recent research using Canada Pension Plan data found that the more a man earns in the 10 to 20 years before retirement, the longer he is likely to live. The study found a remarkable association between men's life expectancy at age 65 and their average annual income when they were age 42 to 64.

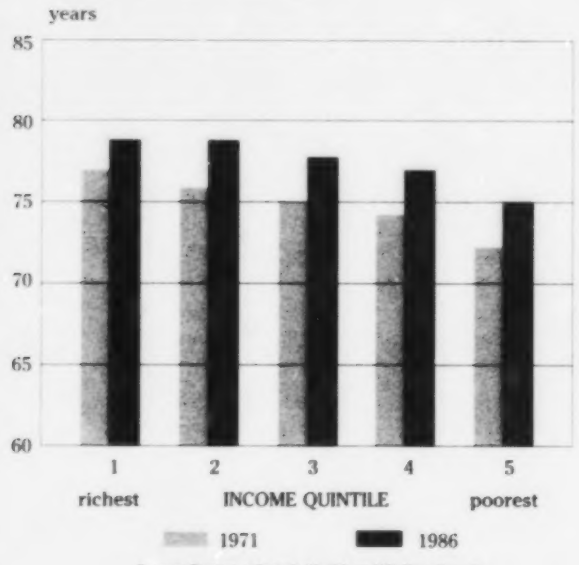
The disparity in life expectancy is striking: men in the bottom five per cent in earnings in the two decades before retirement were twice as likely to die by the age of 70 than men in the top five per cent.[55]

British research indicates that the relative health inequalities between occupational classes persist over many decades, even though the causes of death have changed significantly.[56]

A recent Canadian study points to similar conclusions.[57] An update of research based on 1971 data of mortality rates in Canadian urban areas found that relative mortality (lowest compared to highest) between income groups narrowed only slightly in the 15 years between 1971 and 1986.

The Ontario data from this study illustrates this trend:

Life Expectancy at Birth
Total, Urban Ontario, 1971-1986



Source: Statistics Canada/Health and Welfare Canada (Wilkins, Adams & Brancker, 1989)

Disparity in life expectancy between rich and poor
Urban Ontario, 1971-1988

	Total	*Male*	*Female*
1971	4.1 years	6.0 years	2.2 years
1986	3.5	5.3	1.8
Change	-0.6	-0.8	-0.5

This study also showed that, over the 15-year time span, certain causes of death became more prevalent, some remained the same, and others declined as causes of death. (Deaths from lung cancer increased, for example, there was no change in deaths from breast cancer or alcoholism, and deaths due to infectious diseases declined.)

Together, the British and Canadian research seems to indicate that if certain diseases known to be associated with lower income groups were eliminated, the socio-economic differential would express itself through some other diseases.

This observation should not serve as an argument against tackling particular diseases that afflict those groups. It does suggest, however, that a disease-specific approach to health inequalities is not, in itself, adequate. More generally, it suggests some overall greater vulnerability to a variety of specific ailments among poorer as opposed to wealthier people.

Greater wealth (socio-economic status) is associated with greater health; poorer, and middle income people appear to be more vulnerable than wealthy people to a variety of ailments. The type of ailments that disproportionately affect poorer people change over time.

2) SOCIAL POLICY AND HEALTH

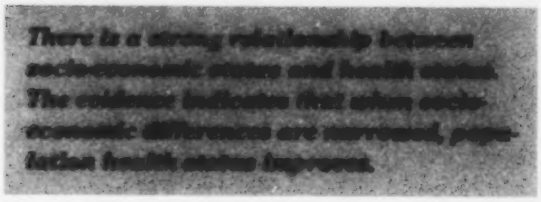
While disease-specific responses to health inequalities are not likely to be sufficient in reducing these disparities, social policy can make an important difference. Some of the poorer, Less-Developed Countries (LDCs) have succeeded in keeping their population much healthier than other LDCs with much higher per capita incomes through conscious policies to reduce health inequalities.[58]

Among developed countries, the importance of political will is underscored by the fact that some studies show that citizens of countries with a narrow range between the top and the bottom income groups have longer life expectancy.

In particular, the life expectancy in Scandinavian countries, where governments have consciously used social policy to equalize opportunities, is higher than in countries with higher per capita incomes, such as the United States.

Evidence of an important link between life expectancy and the distribution of income among a country's citizens was apparent in research which used 1970 life expectancy

figures. This research shows an overall higher life expectancy in developed countries with a narrow range between lowest and highest income groups than in countries with a wider gap. The Netherlands, Sweden and Norway ranked at the top of the heap for life expectancy and a narrow range between top and bottom income groups. The United States, Spain, West Germany and France were clustered together at the lower end of the spectrum. Canada, Australia, and the United Kingdom were all in the middle.[59]



There is a strong relationship between socio-economic status and health status. The evidence indicates that when socio-economic differences are narrowed, population health status improves.

3)THE ECONOMY AND HEALTH

In the above sections we examined the relationship between socio-economic status (income) and health, and the relationship between income distribution and health. Clearly the socio-economic well-being of a population is related to national prosperity, as well as public policy.

Equally, how much a nation can afford to spend on the quality of the social environment (and hence nurturing opportunities for health, as well as access to health care) is directly related to its ability to generate income.

Japan presents an interesting example of how income, income distribution, and national prosperity are linked to health status. In this case, however, superior population health status does not appear to correspond with the high levels of expenditure on health care we have come to expect.[60]

Japan appears to bear out the importance of prosperity to longevity. From a middle-of-the-road position in life expectancy in 1965, the Japanese soared to top place in 1987. During the same period, the Japanese economy also accelerated. By 1987, Japan ranked 4th in GNP/per capita of OECD countries after Switzerland, the United States and Norway.[61]

Researchers who have considered the impact of health care, diet, organization of work and other factors on longevity, speculate that the large and rapid improvement in life expectancy is due to the marked success of the Japanese economy.

Japanese gains in life expectancy have been dramatic. In 1955, the life expectancy at birth for Japanese males was 63.6 years; by 1986 the comparable figure was 75.2. For Japanese women, the comparable figures over that period were 67.8 to 80.9 years.[62]

Data from Eastern Europe lend credibility to the hypothesis linking life expectancy to economic prosperity. During the 1970s, life expectancy actually *declined* in Hungary and Poland during a period of economic deterioration.[63]

Another important factor in the Japanese life expectancy story is the distribution of income. In a review of the data, British researcher Michael Marmot notes that Japan, "with the fastest rate of growth of any OECD country, has the smallest relative differences in income between the top and the bottom 20 per cent of groups,"[64] and goes on to consider how this fact might relate to Japan's life expectancy gains.

The foregoing gains were made while Japan remained a relatively low-cost nation in terms of medical spending. In 1987, Japan spent an estimated 6.8 percent of its GDP on health care as compared to 11.2 percent in the United States and 8.6 in Canada.[65]

It will be interesting to see whether Japan's success can be sustained over time. Nonetheless, there are practical, economic considerations for those prosperous developed economies with high levels of expenditure on health care and low to middle-of-the road population health status.

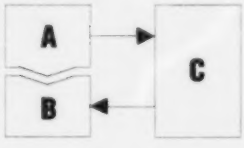
4) A SIMPLIFIED MODEL OF THE ECONOMY

The following model developed by the Canadian Institute for Advanced Research (CIAR), helps to illustrate the importance of wealth to health.

A Simple Model of the Economy

A. Tradeable Goods & Services
- Income Generation
- Little Direct Job Creation
- High Skilled Jobs

B. Service Sector I
Finance, Transportation, Communications, Legal, Other
- Supports "A"
- Job Creation is Modest
- Strength of this Service Sector is Dependent on "A"



C. Service Sector II Affects or Influences Quality of Life, Health, Education, Social Services, Leisure Recreation
- Dependent on Income from "A"
- Sector of Job Creation
- Low to High Skilled Jobs

Copyright 1989, The Canadian Institute for Advanced Research

In this simplified model of the economy, Block A, Tradeable Goods and Services, is the sector of the economy which generates wealth. This sector produces high value-added goods and services traded on international markets.

Block B, Service Sector I, is the infrastructure that serves to support the trading sector. It includes finance, transportation, communications, and legal services, and it is entirely dependent on the success of trade in goods and services.

Income from the trading sector also fuels the service sector that includes health care. In the above diagram, this is Block C, or Service Sector II. It provides those services that contribute to quality of life. Some of these services are education, social services and recreation. Most health care spending would appear in this block, which again depends on the income generated by Block A.

The relationships between the different sectors are clearly complex and interdependent in many ways. Good health care and education, for example, are necessary for a healthy and productive work force; equally, Block A does generate social costs and unrestrained growth can produce adverse effects. A "healthy" balance is necessary, however.

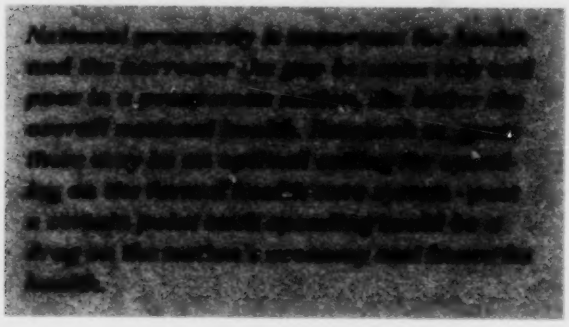
The CIAR model makes it clear that *how much a nation can afford to spend on the quality of life (and hence of health) is directly related to its ability to generate wealth through Sector A as supported by Service Sector I.*

The model also suggests that health care spending should be considered a form of consumption. Health care does not produce wealth in a developed economy. Past a certain point, spending on health care might be wasteful, deflecting investment from tradeable goods and services – the key to generating the necessary income to sustain the prosperity of the nation.

In the United States today, where about 11 per cent of the GDP is devoted to health care, there is widespread concern among corporate leaders that spending on health care has surpassed an optimum threshold and has become a drag on the nation's economy.

Health care, as the largest single industry in modern societies, represents a major commitment of resources. While our health care system must be subject to continuous quality improvement, increased spending on formal health care is not having a corresponding positive impact on health status. Furthermore, overexpansion of the formal health care system could potentially have negative effects as it competes for resources with other health enhancing activities, and as it eats up a greater and greater share of the nations wealth.[66]

In terms of our basic thermostat, how much heat is enough? How can resources be directed towards intentional public policies that influence the other determinants of health as described above? This dynamic tension is illustrated in the framework diagram at the beginning of this paper. The plus and minus sign along the line connecting "Productivity and Wealth" with "Health Care" is suggestive of the trade-offs which may need to be made.



This concludes the discussion of selected research on the determinants of health.

The determinants have been presented within an overall framework that extends well beyond a traditional understanding of health as dependent on our health care system. The new framework allows us to consider the dynamic interplay of many other factors that common sense alone tells us are important. Based on accumulating research evidence, it is clear that it is essential to adopt a new framework for understanding health.The challenge of the future lies in using this knowledge to develop effective public policies that will ensure a healthy and prosperous Ontario.

The following section describes an approach to the development of public policy initiatives which are based on the determinants of health.

B. SOME IMPLICATIONS FOR PUBLIC POLICY

In the opinion of the Healthy Public Policy Committee, the evidence on the determinants of health is so compelling that practical policies based on the research should be developed and implemented. In most cases, they can be built on work already underway.

The committee recognizes that there are many areas of public policy that could have a significant and lasting impact on the health of our population and support the achievement of Ontario's health goals. In an effort to define some initial priorities for action, the committee commissioned a government-wide provincial inventory of public policies that could have a positive impact on our health.

Based on the information outlined earlier in this report, the committee compiled a wide range of policy initiatives. Using a simple scaling procedure, the participants (listed in Appendix B) were asked to: assess the health impacts of different initiatives; indicate the degree of support for the issue (or lack thereof); and comment on the feasibility of implementing particular measures.

As a result, the committee was able to establish three broad priority areas for policy initiatives: healthy child development policy; adult adjustment and labour market adjustment policy; and environmental policy.

The three target policy areas support the achievement of the *Vision of Health* statement and the first five health goals articulated by the Premier's Council on Health Strategy. The Council endorsed the three priority areas in late 1989 and recommended them to the government as areas for action.

The committee conducted three policy workshops in early 1990, with experts from within and outside of government, in an effort to bring a focus to these areas as important to the health of the population. The workshops were designed to delineate guiding principles to inform decision-making in policy development, and to articulate practical policy options within each of the broad areas. The guiding principles that were articulated at the workshops, as well as some of the policies suggested for development, are put forward as "food for thought" in Appendix B.

The following section presents a brief overview of some of the policy development initiatives in the three priority areas. These options are offered as examples of areas in which significant gains in health status could be achieved. They are by no means a definitive or complete list, but rather a set of defensible priorities for action.

The committee presents this information in the hope of sparking and galvanizing interest in the very real possibility of improving the health of Ontario citizens.

1. HEALTHY CHILD DEVELOPMENT POLICY

Policies concerning early childhood are of key importance because there is good evidence that:

> *"... physical and psycho-social insults early in life may be more significant for health and well-being than similar insults in later years....health differentials early in life may not only affect one's immediate health but also may affect the developmental process and the acquistion of other relevant skills essential or useful to "success in later life (e. g. schooling.)"*[67]

One policy area which has the potential to have significant impact on the subsequent health of children is the reduction in the incidence of low birth weight babies. Comprehensive prenatal programs that target high risk groups would have an immediate and lasting impact on health status.

Since poor children are at high risk for psychological and developmental problems, and about one-fifth of Canada's children now live in poverty,[68] any reduction in poverty levels must be an integral part of any strategy of interventions.

The government has begun to tackle some poverty-associated problems, as outlined in the 1988 *Transitions* report,[69] but income and material supports alone are not enough.

Policy intiatives that aim to improve the health and well-being of children must also challenge their abilities, facilitate their creative self-expression, allow them to develop deep and caring relationships with others, and to develop positive self esteem.

2. ADULT ADJUSTMENT AND LABOUR MARKET ADJUSTMENT

The research on work and employment underscores how important it is for people to gain a sense of control and to have the freedom to make decisions. If people feel their contribution to the work force is valued, and know that when job difficulties arise there are good opportunities for retraining, they will also feel more control over their lives and will thus be less likely to suffer ill health. They will also be more productive workers.[70]

The Premier's Council on Technology, in its recent report *People and Skills in the New Global Economy* (1990)[71] has stressed the importance of investing in people by promoting training. This committee believes that a wide array of labour market adjustment policies must be developed in order to preserve the self-respect, health and productivity of people affected by work disruptions.

Similarly, human resources policies that promote greater flexibility in the workplace and recognize the demands made on working people today (especially the demands of caring for older people and children), will benefit the health and well-being of working people and their dependents.

The ability to improve overall health is contingent upon Canada's ability to sustain its prosperity and to ensure a reasonable distribution of resources. Only economic stability and security will give people the opportunity to build, and be part of, healthy social and work environments.

3. ENVIRONMENTAL POLICY

The citizens of Ontario will have the opportunity to live the healthiest lives possible only within the healthiest environment.

Public policies that preserve the integrity of the physical environment are essential to the health of the population. Enforcement of standards of air quality, for example, will be key to controlling the devastating effects of air pollution. The treatment and prevention of hazardous waste will also be essential to a healthy and sustainable environment.

Environmental pollution has been the subject of much attention in recent years. But the health implications of additional aspects of our physical environment need to be highlighted in order to build support for reform. Factors in the human-made environment, such as the safety of our roads and of our working environments, have some serious health implications.

The carnage on Canada's roads is perhaps too easily accepted as the inevitable price of automotive travel. Public policies that promote or adopt measures known to prevent injury or death would have significant impact on our health. Policies that aim to improve workplace safety can also significantly reduce illness and injury.

Public policies that improve the quality of human-made and natural environments are essential to improve the health of our population.

This committee recognizes that environmental conservation and the economy are inextricably linked, and that neither can be considered in isolation. The committee accepts the principle that environmental implications must be given full recognition in all economic decision making, and conversely, that environmental considerations must take into account the state of the economy.

C. SUMMARY AND CONCLUSIONS

The first section of this report consists of an overview of key research on the determinants of health. The research is described in a framework that recognizes the dynamic interplay of many factors and extends our understanding of health beyond a traditional focus on the health care system.

In outlining the theoretical basis and presenting a new framework for understanding the determinants of health, the report creates a compelling argument for practical policy initiatives to nurture the improved health of Ontario citizens.

The second section of this report describes the development of priority areas for public policy, using the research evidence as a base.

The committee consulted widely within government and three priority areas were chosen because of their potential positive impact on population health, and because they enjoy wide support. They are: healthy child development policy; adult adjustment and labour market adjustment policy; and environmental policy. The committee has recommended to Council that these three areas be targetted for action.

Future investments in policy initiatives in these and other areas as highlighted in the research, will help to achieve both the vision of health statement and the health goals for Ontario articulated in *A Vision of Health: Health Goals for Ontario* by the Premier's Council on Health Strategy.

Better integration of social and economic policies seems both desirable and essential if we are to improve health in the future and realize the vision of health. To some extent, the Premier's Councils on Health Strategy and on Technology represent innovative structures through which cross-cutting economic policies and health policies can be developed.

The development of practical policy initiatives suggested in this report, however, will require some fundamental rethinking of the manner in which health policy is presently generated and advanced.

New partnerships with business and labour will be required. Within government, interministerial committees will not be adequate. To actively support health policy, we will need to develop innovative structures within the policy apparatus of government that will effectively integrate social and economic policy. These new structures must extend beyond the political life of any one government.

These structures should be distinct from, but complementary to, those that currently support health care services within Ontario. If they are not, our focus on health and its determinants will be continuously overshadowed by the complex pressures on the health care system.

APPENDIX A: HEALTHY PUBLIC POLICY COMMITTEE MANDATE

HEALTHY PUBLIC POLICY COMMITTEE

The mission statement of the Council is predicated on the WHO definition of health. This broad concept of health goes far beyond the traditional paradigm of health being the sole jurisdiction of the health care system. As pointed out in the Lalonde Report in the 1970s, the health care system is only one element in achieving and maintaining health.

In the report *Health for all Ontario*, the seventh goal it identifies is to: "Establish public policy that supports health." Achievement of this goal (often referred to as healthy public policy) requires a major commitment by all sectors of government in partnership with business, labour, health care providers, community leaders and individuals. The Premier's Council on Health Strategy is in a unique position to provide leadership and direction towards this goal.

TERMS OF REFERENCE

In order to address the need to develop public policy that supports health, the Council established a subcommittee to recommend strategies for action. The following terms of reference guide the activities of the Healthy Public Policy Committee:

1. To recommend specific public policy initiatives which are required to improve the health of Ontario's residents and which are beyond the traditional jurisdiction of the formal health care system.
2. To develop a healthy public policy framework that will allow for assessment, characterization and prioritization of healthy public policy initiatives.
3. To recommend strategies and mechanisms by which the Government of Ontario and its relevant ministries and central agencies can ensure that their policies are supportive of health.
4. To develop, for consideration by Council, strategies that will encourage communities and individuals to be involved in the development and implementation of healthy public policy.
5. To establish a work plan for meeting these terms of reference that encompasses both short term achievements and longer term actions for Council to undertake.

APPENDIX B: POLICY WORKSHOPS - RESULTS AND PARTICIPANTS

1. HEALTHY CHILD DEVELOPMENT POLICY

Workshop participants proposed the following guiding values to support health opportunity for children:

- Every child is entitled to a *fair start* in life and equal opportunity to develop to his or her potential.
- The promotion of healthy child development should be a *collective responsibility, shared with families and across all sectors – such as business, government and volunteer agencies.*

Five possible priority areas for public policy develpment were identified: child care, income and material supports, reproductive/perinatal health, education and interministerial collaboration.

i) In the area of *child care*, participants agreed that government should support policies that ensure the highest quality, accessible and affordable child care for all.

Participants called for incentives to business and schools to more actively provide child care programs and flexible working arrangements.

Legislative changes should be made to support a flexible and comprehensive "cafeteria" of parental leave options. Government should show leadership in supporting the responsibilities of parenting.

ii) Government policies should ensure a minimum standard of *income and material supports* to families with children.

Pregnant women should be ensured an adequate minimum income beyond the poverty line, and the option of paid parental leave should be provided for the first year after birth.

iii) In the area of *reproductive and perinatal health*, greater emphasis should be given to active supports for health during pregnancy, after birth and during infancy.

In particular, an adequate level of nutrition should be assured for pregnant women and their infants through income supplements and nutrition education programs. As well, there should be greater emphasis on family planning and genetic counselling.

iv) *Education* should become a more active partner in supporting healthy family life.

Specifically: school curricula should assist thetransition to adult life; co-operation should be promotedbetween schools and the business sector to provide training programs to ease transition to the working world; and there should be a more flexible approach to exit and re-entry into school programs.

v) Finally, the participants called for *interministerial co-operation*. They recommended that:

A provincial locus of responsibility for the well-being of children should be created which transcends individual ministries.

HEALTHY CHILD DEVELOPMENT POLICY WORKSHOP - PARTICIPANTS

Dan Drown
President and CEO
Canadian Institute for
Child Health

Kay Eastham
Director, Child Care Branch
Ministry of Community and
Social Services

Dr. Ralph Garber
President, Child, Youth and
Family Policy Research Centre
Faculty of Social Work
University of Toronto

Dr. Reva Gerstein
Vice-Chairman
The Hospital for Sick Children
Chairman
The Gerstein Centre for
Psychiatric Patients
Premier's Council on
Health Strategy

Nathan Gilbert
Executive Director
Laidlaw Foundation

Dr. Roch Khazen
Chief, Family Health
Public Health Branch
Ministry of Health

Dr. Colin Maloney
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Toronto Catholic Children's
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Julie Mathian
Preschool Education
Curriculum Policy
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Laurie Roy
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Sandra Scarth
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Children's Services Branch
Ministry of Community and
Social Services

Nancy Shosenberg
Maternal and Newborn
Coordinator
Women's Health Bureau
Ministry of Health

Alex Thomson
President
Ontario Association of
Children's Mental Health
Centres

Dr. Richard Volpe
Research Professor
Institute for Child Study
University of Toronto

2. ADULT ADJUSTMENT AND LABOUR MARKET ADJUSTMENT POLICY

Workshop participants agreed that the goal of adjustment policy should be full employment, in which people *"have things to do that are meaningful and significant, and that instill in them a sense of security and satisfaction."*

Guiding principles for labour market adjustment policy endorsed by the group include the following:

- Everyone has the *right to work in a positive work environment* that is optimal for his or her capabilities and health status.
- *Government, labour and management* must work together to promote healthful adjustment to economic restructuring.
- *Full participation in the workforce* can be supported through employment promotion strategies to improve basic education and training, as well as through income support programs.
- Policies should foster a *commitment to lifelong learning* among education and training institutions.

The group set four priority areas for public policy: labour market disruptions; employment promotion through lifelong learning; flexibility in the workplace; and transitions in adult life.

i) The government should develop an integrated policy of *adjustment for displaced workers* which might include a comprehensive and timely program of income support, training, and counselling to promote the speedy return to satisfactory employment.

Other important areas include retraining programs for workers and the need for programs to market the skills of older workers.

Plant closure legislation should ensure minimum standards for advance notice of layoff; the federal government's Industrial Adjustment Service (IAS) program should be supported as a model; and provincial complements should be considered.

ii) To promote workers' control over work and family life issues, public policy should ensure *greater flexibility in the workplace environment* by providing more options for paid and unpaid leave, flexible working hours and benefits.Incentives should be instituted to promote increased employee participation in decision making in the workplace and skills up-grading options.

Policies must recognize that it is important for disabled workers to have flexible participation in the workplace. The government should demonstrate leadership by acting as a model employer.

iii) Public policies should ensure *support for individuals dealing with major transition events in adult life.*

Social Assistance Reform should give priority to: flexible support and income security programs for recently separated, divorced or widowed single parents; and pre-employment training supports, especially for women experiencing family disruptions.

Home supports for the elderly should be enhanced, as should flexible workplace policies that allow leave for those caring for elderly parents.

iv) Business, government and labour together should promote employment stabilization by providing *continuous education and training.*

The basic skills up-grading of the existing labour force should be promoted, and the importance of lifelong education should be reflected in workplace policies and incentive programs.

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3. ENVIRONMENTAL POLICY

Experts at the workshop on environmental policy delineated a number of principles to guide the development of environmental policy and also established several priority areas for policy development.

Among their guiding principles were the following:

- All members of the community, individually and collectively, have a *right* to a healthy and sustainable environment and the *responsibility* to act in ways that respect the integrity of the ecosystem.
- Decisions that affect the environment and human health must be made openly with public consultation and input.
- Public policy must be informed by credible data from appropriate disciplines, and government and public and private institutions must foster necessary research. At the same time, lack of data should not be an excuse for inaction.

Workshop participants identified several priority areas for environmental policy. They concluded that action in the following areas could have an immediate impact on health:

- *Workplace Safety*: There is unequivocal mortality evidence to show that improved workplace safety measures and tougher enforcement can reduce illness and injury.
- Incentives should be created that will encourage labour and management to share the responsibility of ensuring a healthy work environment. (Comparative data on workplace safety could be shared, for example.) Incentives to improve the quality of workplace design, in order to reduce the likelihood of negative effects on health, should also be created.
- *Transportation Safety*: Unequivocal mortality evidence confirms that motor vehicle accidents are the leading cause of premature death. Improved seat belt compliance, and highway and vehicle regulation and design would reduce the toll of deaths and injuries.

To *prevent* growing environmental hazards, steps should be taken in the following areas:

- *Waste Management*: Ontario residents generate more solid waste than people anywhere else in the world. The province generates about 3 million tonnes of hazardous waste each year, 80 per cent of which is untreated.[72] A comprehensive waste management approach would address the crucial issue of *preventing* waste: business and consumers should be provided incentives, and disincentives, designed to minimize environmentally harmful packaging.
- *Global Climate Change*: To act responsibly as world citizens, Ontario must promote energy conservation, reduce carbon dioxide emissions and eliminate sources of chlorofluorocarbons such as acid aerosol pollutants.

Finally, workshop participants felt that in order to have informed consumers, producers and decision-makers, *comprehensive environmental risk assessment must be supported* and a system to disseminate risk related information to the public must be developed. Possible objectives could include the integration of environment and health data.

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